

The GreenChill Partnership

What is the EPA GreenChill Partnership?

GreenChill is an EPA partnership with food retailers to reduce refrigerant emissions and decrease their impact on the ozone layer and climate change.

The 2010 phaseout of certain hydrochlorofluorocarbons (HCFCs), especially HCFC-22, marked a major step in the transition to alternative refrigerants and an opportunity to use improved technologies for supermarkets. Because many alternative refrigerants are greenhouse gases (e.g., hydrofluorocarbons – HFCs), it is important during this transition to consider reducing emissions of all refrigerants, not just ozone-depleting substances.

What are the GreenChill Partnership Goals?

The goals of the GreenChill Partnership are to provide supermarkets and other industry stakeholders with information and assistance to:

- Transition to environmentally friendlier refrigerants;
- Reduce the amount of refrigerant used by stores and eliminate leaks; and
- Adopt green refrigeration technologies and environmental best practices.

Who can Join GreenChill?

GreenChill is a partnership with food retailers, including supermarkets, grocery stores, supercenters, and wholesale clubs. Food retailers sign a Partnership Agreement with EPA and agree to work toward attaining the GreenChill goals.



GreenChill Partners

Food Retailers

ACME Markets King Kullen Lucky / Albertsons Albertsons Intermountain West Southern CA Bel Air Markets McQuade's Marketplace BJ's Wholesale Club Nob Hill Foods Bloom **Price Chopper Bottom Dollar Publix** Buehler's Fresh Foods Raley's **Cub Foods** Reid's Down to Earth Shaw's/Star Farm Fresh Food & Markets Pharmacy Shop 'n Save, St. Louis Food Lion Food Source Shoppers Food & Pharmacy Fresh & Easy **Sprouts Farmers** Giant Eagle Market Hannaford Stater Bros. Hanover Co-op Supervalu **Food Stores** Sweetbay Harris Teeter **Target** Harvey's Weis Markets Hornbacher's Whole Foods Hy-Vee Jewel/Osco Wild by Nature

Advanced Refrigeration Systems Manufacturers

ARNEG Kysor/Warren
Hill PHOENIX Zero Zone
Hussmann

Chemical Manufacturers

Arkema ICOR International
Dow Chemical Mexichem Fluor
DuPont National
Honeywell Refrigerants



Benefits of the GreenChill **Partnership**

GreenChill Partners in the food retail business have refrigerant emissions rates nearly 50% lower than the EPA-estimated industry average.

If supermarkets nationwide reduced emissions to the current GreenChill Partner average, they could generate annual cost savings of over \$100 million across the industry, while preventing the annual emission of 22 million metric tons of carbon dioxide equivalent and 240 ozone depletion potential (ODP) tons.

For more information, visit our website at www.epa.gov/greenchill

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Why Join the GreenChill Partnership?

The majority of the approximately 36,000 supermarkets in the U.S. use HCFC-22, an ozone-depleting substance and greenhouse gas, as their primary refrigerant. Further, supermarkets often have high refrigerant leak rates. Leaks are harmful to the environment and costly to supermarkets. However, ozone-friendly alternative refrigerants and improved technology are available, and servicing practices exist that reduce refrigerant leak rates and emissions.

In addition, under the current regulatory framework, a switch from ozone-depleting to non-ozone-depleting refrigerants is a logical consideration when remodeling or constructing a new store. While it is legal to run installed HCFC-22 equipment indefinitely, refrigerant production for servicing that equipment will stop by 2020. The GreenChill Partnership presents an opportunity to prepare for this and other deadlines, prepare for future leak repair regulations, and to be recognized for efforts above and beyond actions required under the Clean Air Act. Benefits of the GreenChill Partnership include:

Environmental benefits

The Partnership helps the environment by decreasing the impact of supermarket refrigeration systems on the ozone layer and climate change.

Benchmarking

A benchmarking system allows Partners to evaluate their progress toward environmental goals in relation to their peers.

Recognition and awards

Awards are given by EPA to recognize outstanding achievements by Partners.

Publicity, marketing, and outreach

Partners have access to a variety of marketing materials to highlight their participation in the GreenChill Partnership.

Assistance with environmental strategies and goals

GreenChill assists Partners in developing and attaining corporate environmental stewardship and sustainability goals, with tools such as best practice guidelines and information on improved technology and servicing practices that help reduce refrigerant charges and leak rates.

Opportunities for information sharing among **Partners**

GreenChill holds regular meetings to facilitate Partner information sharing on successful emissions reduction strategies and advances in refrigeration technology.

Research

Partners have access to state-of-the-art EPA research and EPA/industry field tests on substitute refrigerants and advanced POVANCEDB refrigeration technologies.